

**INTEGRATED ELECTROMAGNETIC
INTERFERENCE FILTERS AND FEEDTHROUGHS**

Abstract

5 An assembly integrating commercially available capacitors into filtered
feedthroughs. A feedthrough assembly comprises a plurality of Input/Output (I/O)
conductors, wherein the I/O conductors pass through a hermetic seal such that a first
end of the I/O conductors reside on a non-hermetic side of the hermetic seal and a
second end of the I/O conductors reside on a hermetic side of the hermetic seal, a
10 printed circuit interconnect substrate residing on the hermetic side of the hermetic seal,
and a plurality of ceramic chip capacitors mounted on the printed circuit interconnect
substrate, wherein a first end of each capacitor is connected via the interconnect to the
second end of an I/O conductor and a second end of each capacitor is connected via
the interconnect to a constant voltage level.

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